

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 F01N3/00 F01N1/00 F01N1/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 F01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 430 921 B1 (STUART JOHN W ET AL) 13 August 2002 (2002-08-13) column 3, line 55 - column 6, line 13 figures 1-4 -----	1-3,5,6
X	US 4 610 700 A (MILLER ET AL) 9 September 1986 (1986-09-09) column 1, line 5 - column 2, line 14 figures 1-3 -----	1,5
X	DE 36 14 213 A1 (WERDNIK, IVO, DIPL.-ING) 29 October 1987 (1987-10-29) the whole document -----	1-3,5
A	GB 2 148 390 A (GUY * VIELLARD) 30 May 1985 (1985-05-30) the whole document ----- -/-	1

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

Date of mailing of the international search report

14 February 2005

25/02/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Louchet, N

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2 241 768 A (DEREMER FLOYD E) 13 May 1941 (1941-05-13) the whole document -----	1

Information on patent family members

International Application No
/EP2004/011475

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 6430921	B1	13-08-2002	NONE		
US 4610700	A	09-09-1986	AT	27987 T	15-07-1987
			AU	567988 B2	10-12-1987
			AU	3615584 A	22-05-1985
			BR	8407155 A	08-10-1985
			CA	1240484 A1	16-08-1988
			DE	3464400 D1	30-07-1987
			DK	307585 A ,B,	04-07-1985
			EP	0145909 A2	26-06-1985
			KR	9104917 B1	18-07-1991
			NO	852652 A ,B,	02-07-1985
			WO	8501986 A1	09-05-1985
			JP	1034281 B	18-07-1989
			JP	61500325 T	27-02-1986
DE 3614213	A1	29-10-1987	NONE		
GB 2148390	A	30-05-1985	FR	2553825 A1	26-04-1985
			IT	1196302 B	16-11-1988
US 2241768	A	13-05-1941	NONE		